

Engineering And Robotics Learned Young

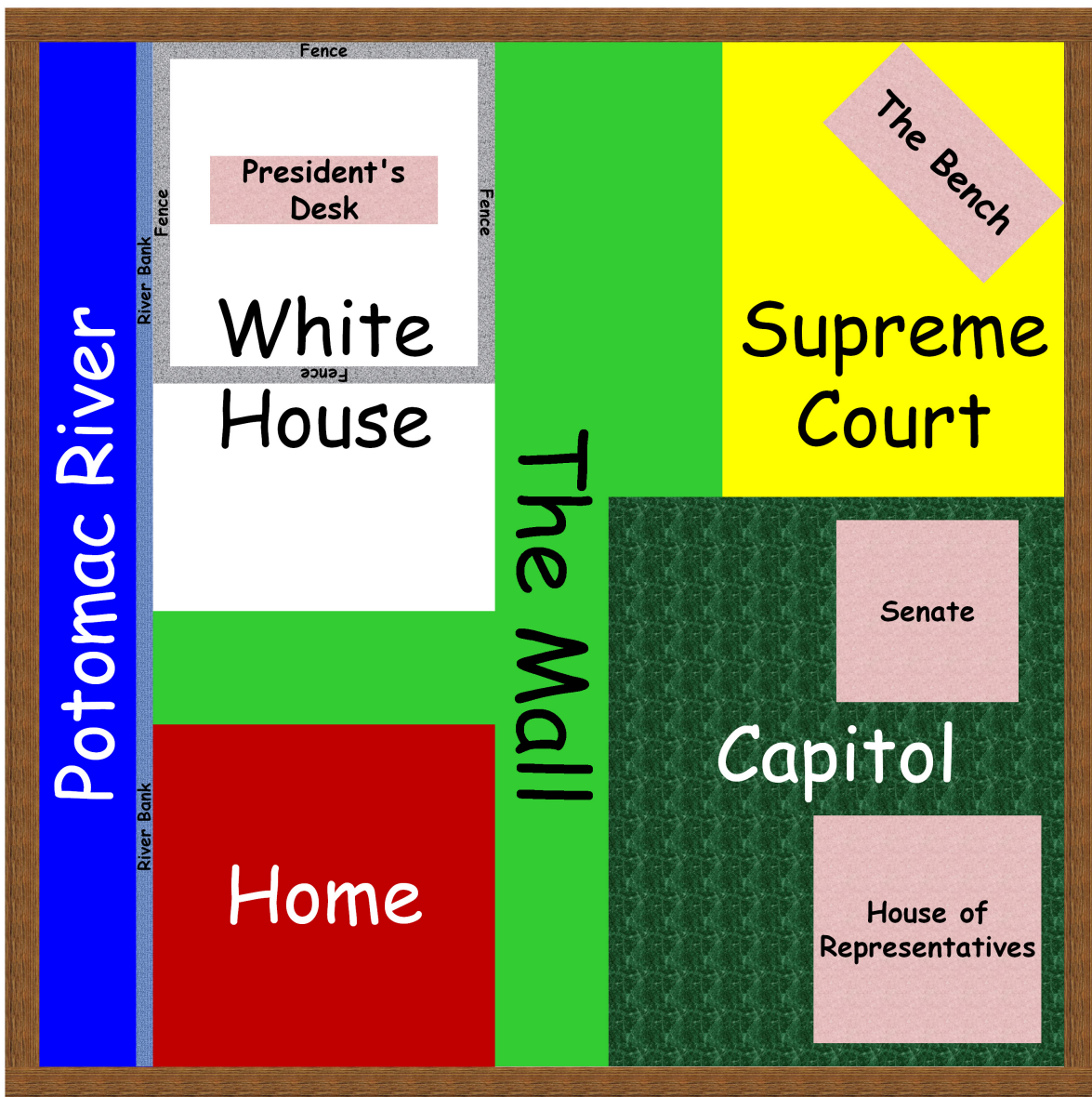
◆ EARLY ◆

2017-2018 Robotics Competition

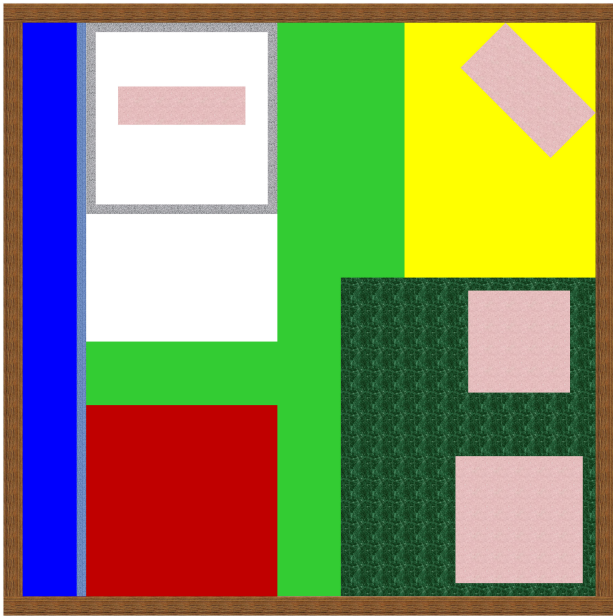
Mission Field Details

The 2017-2018 EARLY Robotics Competition mission field, the **United States of America Capital**, is a 4' x 4' field with a 2" x 4" border with various terrain features. The following information is provided for constructing the mission field.

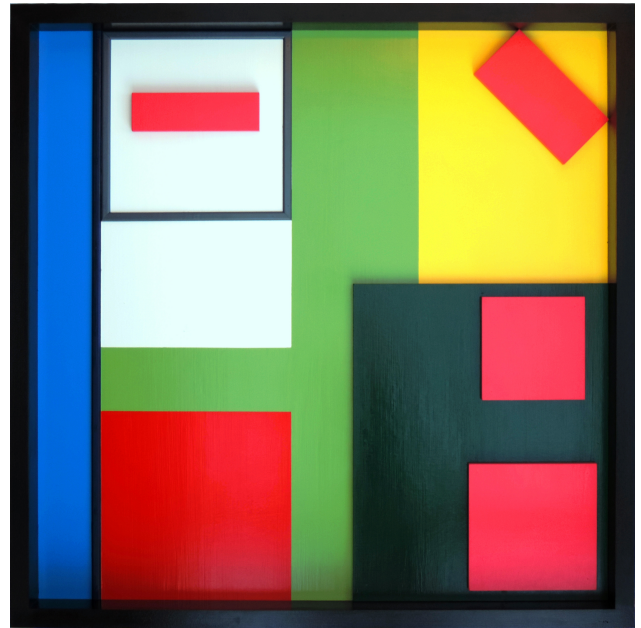
United States of America Capital



2017-2018 EARLY Mission Field



Mission Field Rendering



Mission Field Image

Field
48" x 48"
 $\frac{1}{2}$ " Plywood

Field Perimeter
2" x 4" Boards

White House
15" x 25"

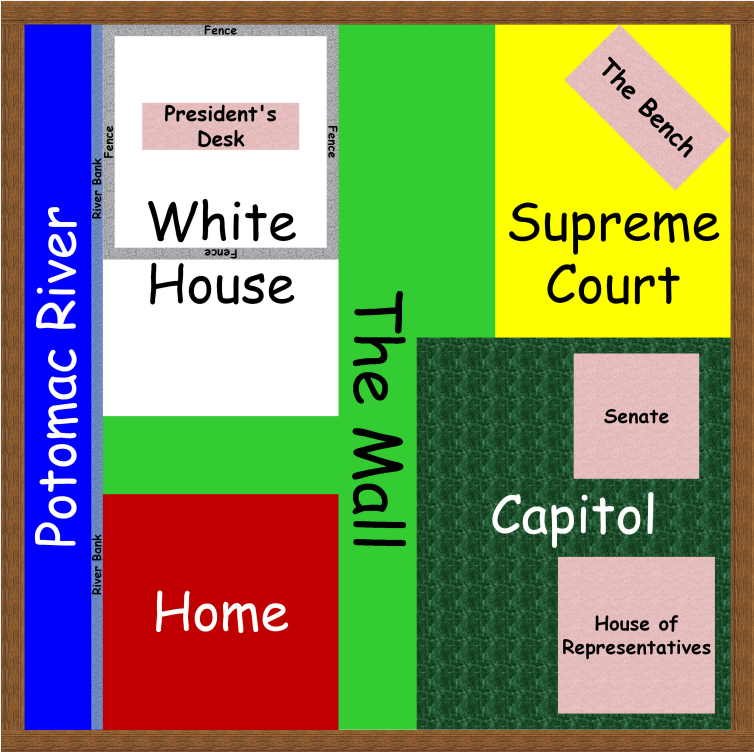
Fence
15" x 15"
 $\frac{3}{4}$ " x $\frac{1}{4}$ " Molding

President's Desk
10" x 3"
 $\frac{3}{4}$ " Plywood

Potomac River
5" x 45"

River Bank
 $\frac{3}{4}$ " x $\frac{1}{4}$ " Molding

Home
15" x 15"



Supreme Court
15" x 20"

The Bench
10" x 5"
 $\frac{3}{4}$ " Plywood

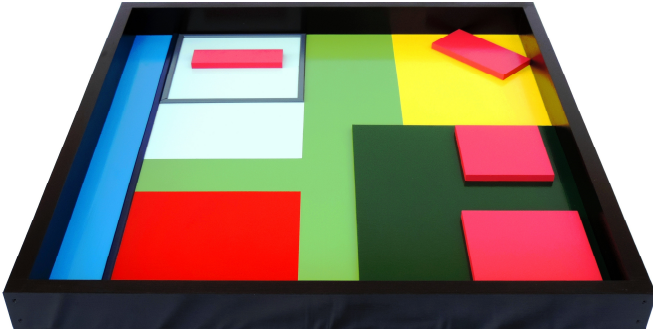
Capitol
20" x 25"
 $\frac{1}{2}$ " Plywood

Senate
8" x 8"
 $\frac{3}{4}$ " Plywood

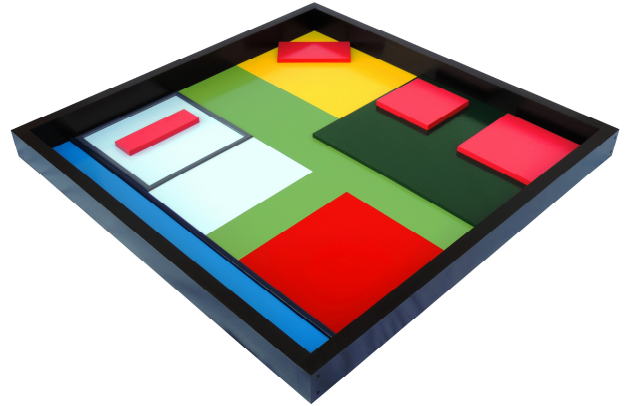
House of Representatives
10" x 10"
 $\frac{3}{4}$ " Plywood

The Mall
"Land"

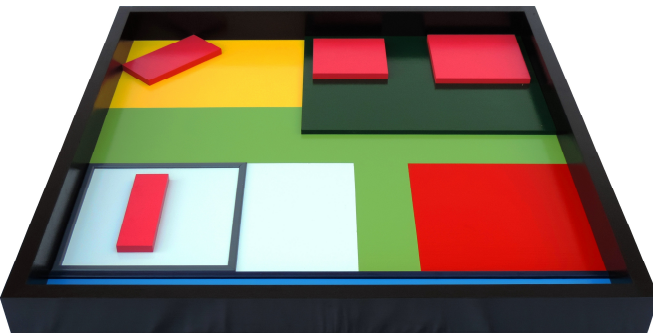
United States of America Capital



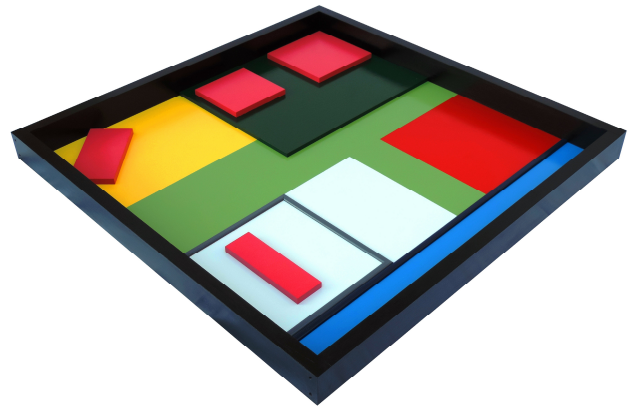
View from HOME



View & from POTOMAC RIVER & HOME



View from POTOMAC RIVER



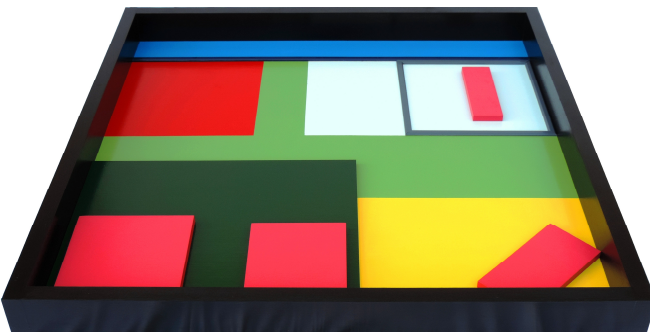
View from WHITE HOUSE & POTOMAC RIVER



View from SUPREME COURT & WHITE HOUSE



View from SUPREME COURT



View from CAPITOL & SUPREME COURT



View from CAPITOL

- The bottom of the mission field is a 4' x 4' sheet of $\frac{1}{2}$ " plywood.
- The outer boundary of the mission field, also referred to as the border and field perimeter, is made of 2x4 boards (actual dimension of $1\frac{1}{2}$ " x $3\frac{1}{2}$ "") and is **black**. The side of the 2x4 board that is $1\frac{1}{2}$ " is attached to the plywood with glue, nails, or screws.
- **HOME** is a 15" by 15" flat area and is **red**.
- **POTOMAC RIVER** is a 5" by 45" flat area and is **blue**. The **POTOMAC RIVER** includes the **RIVER BANK** that is made of $\frac{3}{4}$ " x $\frac{1}{4}$ " screen molding and is **dark blue**; the molding is fastened to the mission field with glue, nails, or screws. The screen molding can be purchased at Home Depot (part # 927-139).
- **WHITE HOUSE** is a 15" by 25" flat area and is **white**. **WHITE HOUSE** includes the **FENCE** that is 15" by 15", made of $\frac{3}{4}$ " x $\frac{1}{4}$ " screen molding, and is **grey**; the molding is fastened to the mission field with glue, nails, or screws. The screen molding can be purchased at Home Depot (part # 927-139).
- **PRESIDENT'S DESK** is a 10" by 3" piece of $\frac{3}{4}$ " plywood and is **rose**. **PRESIDENT'S DESK** is positioned 5" from the top border, $7\frac{1}{2}$ " from the left border, and is fastened to the plywood with glue, nails, or screws.
- **SUPREME COURT** is a 15" by 20" flat area and is **yellow**.
- **THE BENCH** is a 10" by 5" piece of $\frac{3}{4}$ " plywood and is **rose**. **THE BENCH** is positioned at 45 degrees, touches the top border, touches the right border, and is fastened to the plywood with glue, nails, or screws.
- **CAPITOL** is a 20" by 25" piece of $\frac{1}{2}$ " plywood, is **dark green**, and is fastened to the plywood with glue, nails, or screws.
- **HOUSE OF REPRESENTATIVES** is a 10" by 10" piece of $\frac{3}{4}$ " plywood and is **rose**. **HOUSE OF REPRESENTATIVES** is positioned 1" from the right border, 1" from the bottom border, and is fastened to the plywood with glue, nails, or screws.
- **SENATE** is an 8" by 8" piece of $\frac{3}{4}$ " plywood and is **rose**. **SENATE** is positioned 2" from the right border, 16" from the bottom border, and is fastened to the plywood with glue, nails, or screws. This positioning results in the **SENATE** being 5" from the **HOUSE OF REPRESENTATIVES** and 1" from the top edge of the **CAPITOL**.
- **THE MALL** is a flat "land" area and is **light green**.
- The **blue** color can be made by mixing 2 parts navy blue paint with 1 part white paint.
- The **grey** color can be made by mixing 2 parts black paint with 1 part white paint.
- The **rose** color can be made by mixing 2 parts red paint with 1 part white paint.
- The **light green** color can be made by mixing 1 part dark green paint with 2 parts yellow paint.

Please contact Mission.Control@EARLYrobotics.org with any questions or comments.

Thank you for maintaining the spirit of the game!